Appl. No. 10/637713 Amdt. dated [insert date] Preliminary Amendment

## Amendments to the Specification:

Please replace the title with the following amended title:

APPARATUS AND METHODS FOR DEPLOYMENT OF VASCULAR PROSTHESES.

Please replace paragraph [0097] with the following amended paragraph:

[0097] A first preferred geometry of stent segments 32 is illustrated in Figs. 5A-5B. Fig. 5A illustrates a portion of a stent segment 32 in an unexpanded configuration, shown in a planar shape for clarity. Stent segment 32 comprises two parallel rows 98A, 98B of I-shaped cells 100 formed around an axis A so that stent segment 32 has a cylindrical shape. Each cell 100 has upper and lower axial slots 102 aligned with the axial direction and a circumferential slot 104. Upper and lower slots 102 preferably have an oval, racetrack, rectangular or other oblong shape with a long dimension L generally parallel to axis A and a short dimension W perpendicular thereto. Axial slots 102 are bounded by upper axial struts 106 and lower axial struts 107, curved outer ends 108 and curved inner ends 110. Each circumferential slot 104 is bounded by an outer circumferential strut 109 and an inner circumferential strut 111. Each I-shaped cell 100 is connected to the adjacent I-shaped cell 100 in the same row 98A or 98B by a circumferential connecting strut 113. All or a portion of cells 100 in row 98A merge or join with cells 100 in row 98B at the inner ends 110, which are integrally formed with the inner ends 110 of the adjacent cells 100.